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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/807,125	10/10/2001	Joerge Baumgart	22549845	4260
23911	7590	03/31/2004	EXAMINER	
CROWELL & MORING LLP INTELLECTUAL PROPERTY GROUP P.O. BOX 14300 WASHINGTON, DC 20044-4300			SEVER, ANDREW T	
			ART UNIT	PAPER NUMBER
			2851	

DATE MAILED: 03/31/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/807,125	Applicant(s) BAUMGART ET AL.	
	Examiner Andrew T Sever	Art Unit 2851	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
 - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
 - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
 - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 30 September 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 14-26 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 20-26 is/are allowed.
- 6) ☒ Claim(s) 14-19 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 10 October 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>9/30/2003</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Information Disclosure Statement

1. The information disclosure statement (IDS) submitted on 9/30/2003 was filed after the mailing date of the Notice of allowance on 9/23/2003. The submission is in compliance with the provisions of 37 CFR 1.97. Accordingly, the information disclosure statement is being considered by the examiner.

Allowable Subject Matter

2. Applicant is advised that the Notice of Allowance mailed 9/23/2003 is vacated. If the issue fee has already been paid, applicant may request a refund or request that the fee be credited to a deposit account. However, applicant may wait until the application is either found allowable or held abandoned. If allowed, upon receipt of a new Notice of Allowance, applicant may request that the previously submitted issue fee be applied. If abandoned, applicant may request refund or credit to a specified Deposit Account.

3. Prosecution on the merits of this application is reopened on claims 14-19 are considered unpatentable for the reasons indicated below: (see the following prior art rejections paragraphs below.)

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 14-19 are rejected under 35 U.S.C. 102(b) as being anticipated by Yamatake et al. (JPO 03-295408 provided by the applicant and as translated by the US patent office on March 2004).

Yamatake teaches in figure 1 a device, which also includes an inherent method (claims 1-19) for using it for detecting small periodic wave patterns in surfaces (see also page 8 which teaches that the device is used for detecting irregularities (patterns))

Yamatake teaches illuminating a surface using a primary beam of monochromatic coherent light (laser 1 produces a monochromatic beam of light);

Directing said primary beam onto the surface at a large angle of incidence relative to a normal to the surface of the work piece, and approximately at right angles to expected periodic wave patterns (Yamatake teaches on page 9 of the translation that the angle of incidence is between 1 and 10 degrees 80 to 89 relative to a normal to the surface which includes 83 plus or minus 2 degrees);

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Generating a diffraction image of the periodic wave patterns produced in secondary light returned by the surface (diffraction image is generated on screen 5); and

Evaluating an intensity and special distribution of neighboring intensity maxima in the diffraction image (Yamatake teaches in pages 9 and 10 of the translation that electronic means analyze the pattern produced by the secondary light); wherein,

For separate determination of the wave pattern of a ground surface, in which the wave pattern has finer, steeply indented stochastic ground structures superimposed on it, the ground structures are shadowed by providing an approximately grazing incidence of the primary light beam onto the work piece surface at a constant angle of incidence within an angular range of approximately $83 \pm 2^\circ$, whereby a diffraction image solely representing the wave patterns is produced because of an isolated illumination of the wave patterns thereby achieved, with primary light incident on their sides facing towards and away from the light and on respective wave crests. (see also pages 9 and 10 of the translation)

With regards to applicant's claim 15:

The secondary light is collected on a matt panel (screen 5)

With regards to applicant's claim 16:

Yamatake teaches in pages 11-14 how the images are evaluated which includes measuring an intensity distribution of the secondary light as a function of position over an image area of the

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diffraction image and evaluating the measurements with respect to occurrence of intensity maxima.

With regards to applicant's claim 17:

Yamatake teaches in page 14 subjecting the intensity distribution to an autocorrelation and evaluating the autocorrelation function obtained therefrom.

With regards to applicant's claim 18 and 19:

On page 13 of Yamatake, a method of determining the spacing of neighboring intensity maxima/minima and period of wave patterns is described.

Allowable Subject Matter

6. Claims 20-26 are allowed.

7. The following is a statement of reasons for the indication of allowable subject matter:

Claims 20-26 are indicated as allowable for the reasons stated in the non-final rejection mailed on 5/13/2003. Namely the device of Yamatake et al. appears to be larger than the workpiece surface and therefore cannot be adapted to be placed in a defined way on the workpiece surface as required by claim 20 and as shown for example in figure 1 of applicant's drawings.

Conclusion

8. Applicant's submission of an information disclosure statement under 37 CFR 1.97(c) with the fee set forth in 37 CFR 1.17(p) on 9/30/2003 prompted the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 609(B)(2)(i). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Andrew T Sever whose telephone number is 571-272-2128. The examiner can normally be reached on 8:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Russell Adams can be reached on 571-272-2112. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

AS


RUSSELL ADAMS
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2800